

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3534	257/738	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 19:09
L3	1483	257/704	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 19:30
L4	4	(semiconductor or die or dice or chip or IC) and mold\$3 with (epoxy near resin) with curing near agent with catalyst with coupling near agent	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 19:14
L5	2790	257/706	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 19:46
L7	943	257/720	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 20:02
L8	2	"6362530".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 20:19
L9	0	257/E23.119	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 20:22
L10	2	257/E23.087	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 20:22

## EAST Search History

L11	4	257/E23.101	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/03/13 20:22
S1	9	"61102757" or "61019154" or "60154543" or "6433412" or "6492724" or "6737755" or "6724061"	USPAT; JPO	OR	OFF	2004/09/07 03:27
S2	294	(semiconductor or die or chip or IC) and heat near (spreader or sink or transfer) and thermal near grease and (mold\$3 or encapsulat\$3)	USPAT; JPO	OR	OFF	2004/09/07 04:11
S3	265	(semiconductor or die or chip or IC) and heat same thermal near grease and (mold\$3 or encapsulat\$3)	USPAT; JPO	OR	OFF	2004/09/07 04:14
S4	63	(semiconductor or die or chip or IC) and (lid or cap) same thermal near grease and (mold\$3 or encapsulat\$3)	USPAT; JPO	OR	ON	2004/09/07 06:13
S5	159	(semiconductor or die or chip or IC) and (lid or cap) and thermal near grease and (mold\$3 or encapsulat\$3)	USPAT; JPO	OR	ON	2004/09/07 06:20
S6	96	((semiconductor or die or chip or IC) and (lid or cap) and thermal near grease and (mold\$3 or encapsulat\$3)) not ((semiconductor or die or chip or IC) and (lid or cap) same thermal near grease and (mold\$3 or encapsulat\$3))	USPAT; JPO	OR	ON	2004/09/07 06:13
S7	339	(semiconductor or die or chip or IC) and heat and thermal near grease and (mold\$3 or encapsulat\$3)	USPAT; JPO	OR	ON	2004/09/07 07:00
S8	778	(semiconductor or die or chip or IC) and heat and thermal near grease	USPAT; JPO	OR	ON	2004/09/07 07:54
S9	439	((semiconductor or die or chip or IC) and heat and thermal near grease ) not ((semiconductor or die or chip or IC) and heat and thermal near grease and (mold\$3 or encapsulat\$3))	USPAT; JPO	OR	ON	2004/09/07 07:01

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S10	314	(semiconductor or die or chip or IC) and (lid or cap) and thermal near grease	USPAT; JPO	OR	ON	2004/09/07 07:54
S11	5	"5977633".pn. or "5223741".pn. or "5585671".pn. or "6462410".pn. or "4748495".pn.	USPAT	OR	OFF	2004/09/07 08:30
S12	64	(semiconductor or die or chip or IC) and heat near (spreader or sink or transfer) and thermal near grease and (mold\$3 or encapsulat\$3) and (silicon or "Si") with chip	USPAT	OR	OFF	2004/09/07 09:19
S13	21	(semiconductor or die or chip or IC) and heat near (spreader or sink or transfer) with (copper or "Cu") and thermal near grease and (mold\$3 or encapsulat\$3) and (silicon or "Si") with chip	USPAT	OR	OFF	2004/09/07 09:19
S14	2440	257/738	USPAT	OR	OFF	2004/09/08 12:05
S15	2775	257/738	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/08 15:48
S16	20	"5785799"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/09/08 15:56
S17	1570	(mold\$3 or encapsulat\$3) with curing near agent	USPAT	OR	OFF	2004/09/08 19:43
S18	5	((mold\$3 or encapsulat\$3) with curing near agent) and (semiconductor or die or chip or IC) and heat near sink with ("Cu" or copper)	USPAT	OR	OFF	2004/09/08 19:46
S19	9	((mold\$3 or encapsulat\$3) with curing near agent) and (semiconductor or die or chip or IC) and heat near sink with ("Cu" or copper or aluminum or "Al")	USPAT	OR	OFF	2004/09/10 19:43
S20	0	thermal near grease with (silicon near rubber and particles)	USPAT	OR	ON	2005/09/01 13:45
S21	0	thermal near grease with silicon near rubber with particles	USPAT	OR	ON	2004/09/10 19:45
S22	3	thermal near grease with silicon near rubber	USPAT	OR	ON	2004/09/10 19:46

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S23	0	thermal near grease same (silicon near rubber and particles)	USPAT	OR	ON	2004/09/10 19:46
S24	11	thermal near grease same silicon near rubber	USPAT	OR	ON	2004/09/10 19:52
S25	18	(thermal or heat) with grease same silicon near rubber	USPAT	OR	ON	2004/09/10 20:12
S26	0	(thermal or heat) with grease same (epoxy with curing near agent with catalyst with coupling near agent)	USPAT	OR	ON	2004/09/10 20:14
S27	0	(thermal or heat) with grease same (epoxy with curing near agent with catalyst with coupling)	USPAT	OR	ON	2004/09/10 20:44
S28	10	epoxy with (mold\$3 or encapsulat\$3) and (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "7"	USPAT	OR	ON	2004/09/10 21:24
S29	22	epoxy with (mold\$3 or encapsulat\$3) and (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "5"	USPAT	OR	ON	2004/09/10 20:52
S30	5	epoxy with (mold\$3 or encapsulat\$3) same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "5"	USPAT	OR	ON	2004/09/10 20:53
S31	7	epoxy with (mold\$3 or encapsulat\$3) same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "6"	USPAT	OR	ON	2004/09/10 20:55
S32	1	epoxy with (mold\$3 or encapsulat\$3) same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "8"	USPAT	OR	ON	2004/09/10 20:56
S33	2	epoxy with (mold\$3 or encapsulat\$3) same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "9"	USPAT	OR	ON	2004/09/10 20:57
S34	8	epoxy with (mold\$3 or encapsulat\$3) same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "10"	USPAT	OR	ON	2004/09/10 21:14
S35	41	("Cu" or copper) with coefficient near thermal near expansion with "17"	USPAT	OR	ON	2004/09/10 21:15
S36	0	("Cu" or copper) with coefficient near thermal near expansion with "17" near "ppm/.degree"	USPAT	OR	ON	2004/09/10 21:15

## EAST Search History

S37	19	("Cu" or copper) with coefficient near thermal near expansion with "17" near ppm\$8	USPAT	OR	ON	2004/09/10 21:16
S38	26	epoxy same (mold\$3 or encapsulat\$3) and (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "10"	USPAT	OR	ON	2004/09/10 21:25
S39	2	epoxy same (mold\$3 or encapsulat\$3) and (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "10" near ppm\$8	USPAT	OR	ON	2004/09/10 21:26
S40	1	epoxy same (mold\$3 or encapsulat\$3) and (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "4" near ppm\$8	USPAT	OR	ON	2004/09/10 21:27
S41	0	epoxy same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "4" near ppm\$8	USPAT	OR	ON	2004/09/10 21:27
S42	0	epoxy same (mold\$3 or encapsulat\$3) with coefficient near thermal near expansion with "1" near ppm\$8	USPAT	OR	ON	2004/09/10 21:27
S43	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "5" near ppm\$8	USPAT	OR	ON	2004/09/10 21:28
S44	1	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "6" near ppm\$8	USPAT	OR	ON	2004/09/10 21:28
S45	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "7" near ppm\$8	USPAT	OR	ON	2004/09/10 21:28
S46	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "8" near ppm\$8	USPAT	OR	ON	2004/09/10 21:28
S47	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "9" near ppm\$8	USPAT	OR	ON	2004/09/10 21:29
S48	1	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "10" near ppm\$8	USPAT	OR	ON	2004/09/10 21:29

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S49	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "11" near ppm\$8	USPAT	OR	ON	2004/09/10 21:29
S50	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "12" near ppm\$8	USPAT	OR	ON	2004/09/10 21:29
S51	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "14" near ppm\$8	USPAT	OR	ON	2004/09/10 21:29
S52	3	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "15" near ppm\$8	USPAT	OR	ON	2004/09/10 21:31
S53	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "4" near ppm\$8	USPAT	OR	ON	2004/09/10 21:31
S54	1	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "3" near ppm\$8	USPAT	OR	ON	2004/09/10 21:32
S55	0	epoxy with (mold\$3 or encapsulat\$3) and epoxy with coefficient near thermal near expansion with "2" near ppm\$8	USPAT	OR	ON	2004/09/10 22:52
S56	4	silicon with coefficient near thermal near expansion with "2" near ppm\$8	USPAT	OR	ON	2004/09/10 22:53
S57	1	silicon with (chip or die ) and silicon with coefficient near thermal near expansion with "2" near ppm\$8	USPAT	OR	ON	2004/09/10 22:54
S58	23	silicon with (chip or die ) and silicon with coefficient near thermal near expansion with "3" near ppm\$8	USPAT	OR	ON	2004/09/10 23:39
S59	1726	257/704	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/10 23:54
S60	2443	257/706	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/11 00:13

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S61	1515	257/717	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/11 00:42
S62	1914	257/718	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/11 00:55
S63	1511	257/719	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/11 01:10
S64	1155	257/720	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/11 01:11
S65	943	438/122	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/09/11 01:12
S66	0	(semiconductor or die or chip or IC) same (heat near (sink or spread\$3 or transfer or radiat\$3) or cap or lid) and thermal near grease same silicon near rubber with particle	USPAT	OR	ON	2005/03/16 23:06
S67	0	(semiconductor or die or chip or IC) same (heat near (sink or spread\$3 or transfer or radiat\$3) or cap or lid) and thermal near grease and silicon near rubber with particle	USPAT	OR	ON	2005/03/16 23:07
S68	3	(semiconductor or die or chip or IC) same (heat near (sink or spread\$3 or transfer or radiat\$3) or cap or lid) and thermal near grease same silicon with particle	USPAT	OR	ON	2005/03/16 23:09
S69	1	(semiconductor or die or chip or IC) same (heat near (sink or spread\$3 or transfer or radiat\$3) or cap or lid) and thermal near grease same (silicon or silicone or "Si") with rubber with (particle or filler)	USPAT	OR	ON	2005/03/16 23:32

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S70	0	(semiconductor or die or chip or IC) same (heat near (sink or spread\$3 or transfer or radiat\$3) or cap or lid) and thermal near grease same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:34
S71	0	thermal near grease same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:34
S72	0	thermal near (grease or compound) same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:34
S73	0	thermal near (grease or compound material) same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:35
S74	0	thermal near (grease or compound or material or resin) same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:36
S75	0	thermal near (grease or compound or material or resin or adhesive or glue) same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:47
S76	3	thermal near (grease or compound or material or resin or adhesive or glue) and (grease or compound or material or resin or adhesive or glue) same epoxy near resin with curing near agent with catalyst with coupling with agent	USPAT	OR	ON	2005/03/16 23:54
S77	0	thermal near (grease or compound or material or resin or adhesive or glue) and (grease or compound or material or resin or adhesive or glue) same epoxy near resin with curing near agent with catalyst with coupling with agent with (fillers or particles) with flame near retardant	USPAT; JPO	OR	ON	2005/03/17 00:35

## EAST Search History

S78	3646	257/723	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/08/31 19:14
S79	123	508/161	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/17 00:28
S80	1	thermal with (grease or compound or material or resin or adhesive or glue) and (grease or compound or material or resin or adhesive or glue) same epoxy near resin with curing near agent with catalyst with coupling with agent with (fillers or particles) with flame near retardant	USPAT; JPO	OR	ON	2005/03/17 00:36
S81	0	thermal with (grease or compound or material or resin or adhesive or glue) and (grease or compound or material or resin or adhesive or glue) same epoxy near resin with curing near agent with catalyst with coupling with agent with (fillers or particles) with flame near retardant with (mold\$3 or encapsulat\$3) near releas\$3 near agent	USPAT; JPO	OR	ON	2005/09/01 13:18
S82	0	thermal near (grease or compound or material or resin or adhesive or glue) and (grease or compound or material or resin or adhesive or glue or mold\$3 or encapsulat\$3) same epoxy near resin with curing near agent with catalyst with coupling with agent with (fillers or particles) with flame near retardant	USPAT	OR	OFF	2005/03/21 14:20
S83	0	(grease or compound or material or resin or adhesive or glue or mold\$3 or encapsulat\$3) same epoxy near resin with curing near agent with catalyst with coupling with agent with (fillers or particles) with flame near retardant	USPAT	OR	OFF	2005/03/21 14:20

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S84	0	thermal near (grease or compound or material or resin or adhesive or glue) and (grease or compound or material or resin or adhesive or glue or mold\$3 or encapsulat\$3) same epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant	USPAT	OR	OFF	2005/03/21 14:21
S85	0	(grease or compound or material or resin or adhesive or glue or mold\$3 or encapsulat\$3) same epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant	USPAT	OR	OFF	2005/03/21 14:21
S86	0	"6509622" and width with corner	USPAT; JPO	OR	OFF	2005/03/24 11:41
S87	0	"6509622" and corner	USPAT; JPO	OR	OFF	2005/03/24 11:40
S88	1	"6509622" and width	USPAT; JPO	OR	OFF	2005/03/24 11:41
S89	1	"20050161744"	US-PGPUB; USPAT	OR	OFF	2005/08/31 18:11
S90	3719	257/723	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/08/31 19:25
S91	3245	257/738	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/08/31 19:25
S92	4	thermal with (grease or compound or material or resin or adhesive or glue) and epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant same (mold\$3 or encapsulat\$3 or cover\$3 with resin) same releas\$3 near agent	USPAT; JPO	OR	ON	2005/09/01 13:26

## EAST Search History

S93	3	thermal with (grease or compound or material or resin or adhesive or glue) and epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant same (mold\$3 or encapsulat\$3 or cover\$3 with resin) with releas\$3 near agent	USPAT; JPO	OR	ON	2005/09/01 13:27
S94	4	thermal with (grease or compound or material or resin or adhesive or glue) and epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant same (mold\$3 or encapsulat\$3 or cover\$3 with resin) with releas\$3	USPAT; JPO	OR	ON	2005/09/01 13:38
S95	0	thermal near (grease or compound or material or resin or adhesive or glue) and epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant same (mold\$3 or encapsulat\$3 or cover\$3 with resin) with releas\$3	USPAT; JPO	OR	ON	2005/09/01 13:38
S96	2	(thermal or heat) near (grease or compound or material or resin or adhesive or glue) and epoxy near resin same curing near agent same catalyst same coupling with agent same (fillers or particles) same flame near retardant same (mold\$3 or encapsulat\$3 or cover\$3 with resin) with releas\$3	USPAT; JPO	OR	ON	2005/09/01 13:39
S97	3	thermal near grease with (silicon or silicone) near rubber with (particles or filler or fill\$3)	USPAT	OR	ON	2005/09/01 13:47
S98	5	thermal near grease same (silicon or silicone) near rubber with (particles or filler or fill\$3)	USPAT	OR	ON	2005/09/01 13:48
S99	22	thermal near grease same (silicon or silicone) near rubber	USPAT	OR	ON	2005/09/01 13:55
S100	17	S99 not S98	USPAT	OR	ON	2005/09/01 13:48
S101	195	(thermal or heat or "Si" or silicon or silicone) near grease same (silicon or silicone) near rubber	USPAT	OR	ON	2005/09/01 13:56

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S10 2	43	(thermal or heat or "Si" or silicon or silicone) near grease same (silicon or silicone) near rubber with (particles or filler or fill\$3)	USPAT	OR	ON	2005/09/01 13:56
S10 3	38	S102 not S99	USPAT	OR	ON	2005/09/01 13:56
S10 4	0	"2002079573".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/13 15:04
S10 5	0	"2002079573"	US-PGPUB; USPAT	OR	OFF	2006/03/13 15:03
S10 6	72	257/718	US-PGPUB	OR	OFF	2006/03/13 15:03
S10 7	1	"20020079573".pn.	US-PGPUB; USPAT	OR	OFF	2006/03/13 15:06
S10 8	2	"20020079573".pn. or "2003069263"	US-PGPUB; JPO	OR	OFF	2006/03/13 15:06
S10 9	4	("6362530".pn. or "5917702".pn. or "6492724".pn. or "6309908".pn.) and (semiconductor or die or dice or chip or IC) with (packag\$3 or mold\$3 or encapsulat\$3)	USPAT	OR	OFF	2006/03/13 15:59
S11 0	25	("3986251"   "4035830"   "4147889"   "4181249"   "4293587"   "4321617"   "4323914"   "4434434"   "4451972"   "4535219"   "4772935"   "4866505"   "5161728"   "5183972"   "5230924"   "5248079"   "5392982"   "5672548"   "5847929"   "5909056"   "5942794"   "5990418"   "6013109"   "6197619"   "6376907").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/03/13 16:08
S11 1	0	("6492724").URPN.	USPAT	OR	OFF	2006/03/13 16:08
S11 2	9	("4147889"   "4742024"   "5107329"   "5381039"   "5623394"   "5909056"   "5931222"   "5990418"   "6008536").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/03/13 16:14
S11 3	6	("6376907").URPN.	USPAT	OR	OFF	2006/03/13 16:13
S11 4	29	("5990418").URPN.	USPAT	OR	OFF	2006/03/13 16:17

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S11 5	18	("4514752"   "4985753"   "5014115"   "5132875"   "5268533"   "5297006"   "5317107"   "5323294"   "5324888"   "5357673"   "5365402"   "5414214"   "5455457"   "5471366"   "5528456"   "5539151"   "5706579"   "5745344").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/03/13 16:22
S11 6	6	("2946681"   "3694699"   "4233645"   "4381818"   "4823863").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/03/13 16:30
S11 7	34	("5323294").URPN.	USPAT	OR	OFF	2006/03/13 16:30
S11 8	10	("4914551"   "5459352"   "5504652"   "5710459"   "5870285"   "5898571"   "5920458"   "5926371"   "5933324"   "6008536").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/03/13 16:49
S11 9	14	("6188578").URPN.	USPAT	OR	OFF	2006/03/13 16:51